

REMARKS

Applicants note with appreciation the Examiner's renumbering of the claims. The undersigned regrets the error, and respectfully thanks the Examiner for renumbering the claims and apologizes for any inconvenience caused by the error.

Claim 1 was amended to recite that the matrix contains a hydroxypropyl cellulose of the recited viscosity and the resulting matrix continues to encapsulate the fragrance or flavor material and remains encapsulated at the recited temperatures. Support for the hydroxypropyl cellulose is found on page 5, lines 10-15 of the specification. Support for the proposition that the encapsulated material continues to protect the flavor or fragrance material at the elevated temperature is found on page 6, lines 9-12 of the specification.

The newly added claims 9-17 further recite the hydroxypropyl cellulose levels, and the viscosity of the hydroxypropyl cellulose support is found on page 5, line 10, and that the addition of the hydroxypropyl cellulose protects the flavor or fragrance at the elevated temperature is found on page 6, lines 9-12 of the specification.

Applicants respectfully submit that the claims as presented have been amended to recite the subject matter in a form overcoming all of the rejections of record. Reconsideration of the rejections of record is respectfully requested in light of the following comments.

Claims 1-8 stand rejected under 35 USC 103 as being unpatentable over Porzio (U.S. 6,187,351) in view of Cherukuri (U.S. 5,004,595). The Examiner states that Porzio discloses an encapsulated flavor composition

having a glass transition temperature of greater than or equal to 35°C comprising a flavor material encapsulated in a matrix comprising a sugar, maltrodextrin (5 to 15 D.E.), starches, food acids, corn syrup solids and a cellulose. The Examiner continues that the claims differ as to the specific use of hydroxypropyl cellulose (HPC). The Examiner continues that Cherukuri discloses an encapsulated flavor composition comprising celluloses including HPC. The Examiner concludes that a person with ordinary skill in the art would find the pending claims obvious.

Applicants respectfully traverse the rejection.

The present invention claims recite encapsulation materials suitable for encapsulating flavors or fragrances. As is well appreciated in the art, flavor and fragrance materials are inherently volatile materials and during processing and other manufacturing processes used in manufacturing consumer and food products, the flavor or fragrance materials are lost due to the use of high temperatures used in processing these materials. Encapsulation technologies have been developed in part to protect flavor and fragrance ingredients and minimize losses during processing thereby providing ample flavor or fragrance to the consumer when they use the product.

The present invention is directed to the discovery that the incorporation of the recited HPC, at the recited levels, with the recited viscosity values, improves the temperature profile properties of the encapsulation materials, thereby providing additional protection to flavor or fragrance materials encapsulated therein.

Applicants respectfully submit that the combination of Porzio and Cherukuri do not render the claimed invention obvious to a person with ordinary skill in the art.

First, as the present invention and the Porzio disclosure state, the formation of a glassy encapsulation matrix requires the careful selection of materials and the elimination of materials that would adversely effect the combination. Applicants respectfully submit that a person with skill in the art would appreciate the complexity of forming the high temperature resistant encapsulation (glassy matrix) of the present invention and not find motivation to include HPC from another disclosure which is not directed to the formation of a glassy matrix.

In the creation of a glassy matrix the proper selection of ingredients, at the correct level is important for proper function of the encapsulation. For example, as both disclosures describe, the water content must be carefully balanced because the improper level of water will reduce the properties of the encapsulation materials. The point of this disclosure is that it is very important in these situations to carefully select the proper materials and the correct level of materials because improper selection will adversely effect the combination. Applicants respectfully submit that the Examiner's suggestion that HPC has been used in encapsulation and it would be obvious to incorporate HPC into the Porzio combination overlooks the critical balance of ingredients required to make the glassy matrix of the present invention and as recited in Porzio.

Further support for Applicants position is amply provided in Porzio, since it discloses various combinations of materials, the combinations being mixtures of materials. The specific combinations of ingredients, recited in column 5, as specific combinations (a) - (g) provides the criticality of the combination of ingredients. Applicants further submit that a person with skill in the art after reading the careful disclosure and range of ingredients used to make Porzio's glassy matrix would not be motivated to add HPC as disclosed by Cherukuri. The Cherukuri disclosure is fairly characterized as a disclosure of multiple

layer encapsulation technology without a disclosure of the criticality of making a glassy matrix.

Applicants respectfully submit that the Porzio disclosure describes as critical the ingredients used and level of ingredients in the encapsulations and that the combination of disclosures relied upon by the Examiner does not suggest the incorporation of HPC in the present invention.

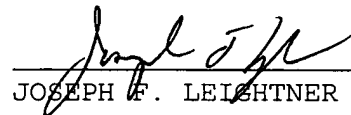
Second, the claims as amended recite a viscosity and level of HPC to be used in the present invention. There is no disclosure or suggestion of the use of this type of HPC used in the present invention found in either disclosure. This level can not be fairly suggested by the combination.

Third, the invention recites that the encapsulation must be capable of protecting the flavor or fragrance materials at the elevated temperatures. There is no disclosure or suggestions of this element in the invention in either disclosure.

For the above reasons, Applicants respectfully submit that using the proper analysis of obviousness, that the claimed invention including every element is viewed as a whole, is not suggested by the combination of disclosures relied upon by the Examiner. Applicants respectfully submit that a person with ordinary skill in the art would not find the invention obvious for the reasons set forth above.

Applicants respectfully submit that the claims as amended are in full compliance with all statutory provisions and the reasons for rejection of record are no longer applicable. Early and favorable consideration of the pending claims is earnestly solicited.

Respectfully submitted,



JOSEPH F. LEIGHTNER
Attorney for Applicants
Registration No. 34,209

INTERNATIONAL FLAVORS AND FRAGRANCES INC.
521 West 57th Street
New York, NY 10019

Telephone: (212) 708-7103
FAX: (212) 708-7253

joseph.leightner@iff.com

Date: January 12, 2004